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IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 RESEARCH TRIANGLE PARK, NC 27709			EXAMINER LAN, TZU-HSIANG	
			ART UNIT	PAPER NUMBER
			4156	
			NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

RSWIPLAW@us.ibm.com

Office Action Summary

Application No.

10/821,076

Applicant(s)

TATAVU ET AL.

Examiner

TZU-HSIANG LAN

Art Unit

4156

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Introduction

The following is a non-final office action in response to the communications received on April 08, 2004. Claims 1-16 are now pending in this application

The Examiner notes that the scope of the claim rejections in this Office Action are not limited to the prior art citations listed in the claim rejections, but in fact encompasses the prior art in their entirety. The Applicant is advised to review the prior art in its totality when considering the Office Action.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on September, 26, 2003. It is noted, however, that applicant has not filed a certified copy of the 2442796 application as required by 35 U.S.C. 119(b).

Claim Objections

1. **Claims 13-16** are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. See MPEP 608.01(n).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7-12 are rejected under 35 U.S.C. 101 because claims 7-12 describe a computer system with subject means to carry out various functions. All the subject means can be reasonably interpreted as software. Software application is a nonstatutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-6, 7-9 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenthal et al.

As to claim 1, Rosenthal et al. disclose claimed invention including a method for binding of a workflow engine to a data model containing data objects associated with a plurality of resources (Fig 1, workflow engine bind to data model i.e. database, personal development, and personal administration), for a workflow request having a first message type in a computer system (Col. 9 line 21-25, i.e. workflow request corresponds to submission for implementation; Col 9 lines 24-47, i.e. first type message consist of mode indicator, "SA" or "SH", prior to submission), said method comprising the steps of:

updating said workflow request with pre-process workflow data (Col. 9 lines 21-25, i.e. workflow request corresponds to submission for implementation; pre-process workflow data disclosed in Col. 8 lines 60-65);

transforming said updated workflow request from first message type to a second message type supported by said workflow engine (Col 9 lines 37-47, i.e. message type transformed from mode indicator, "SA" or "SH", to specific scenario, second message type, which can be carried out by the workflow engine Col. 9 lines, 59-62);

processing said updated workflow request to update said plurality of resources in said computer system (col. 10 lines 20-37, where updated workflow request is processed by implementing scenario to update proposed position changes, i.e. plurality of resources, [col. 10 lines 48-51]); and,

updating said data objects of said data model associated with updated said plurality of resources (Col 13 lines 20-23 i.e. database, data objects, is updated according to updated plurality of resource, i.e. employee new positions).

Regarding claim 2, see the discussion in claim 1. Rosenthal et al. further disclose that the step of updating said workflow request comprises:

determining a plurality of request types associated with said workflow request (Col. 9 lines 34-47, and Table 1, i.e. plurality of request types corresponds to different mode indicator "SA" or "SH"); and

resolving said plurality of request types based on said data objects of said data model (Table 1, where plurality of requests types, SA or SH, is resolved to different scenario based on data object, workflow object, of said data model).

Concerning claim 3, see the discussion in claim 2. Rosenthal et al. further disclose that wherein said step of resolving comprises:

matching logical operations associated with said plurality of request types with corresponding said data objects identified in said data model (Table 1, Event and LTEXT corresponds to logical operations and they associated with plurality of request, SA or SH); and,

substituting corresponding said data objects representative of said pre-process workflow data into said workflow request (Col. 9 line 60 - col. 10 line 11, and table 1 disclose substituting data objects, scenario and events representing SA or SH, into workflow request, submit new employee position [col. 10 lines 48-55, and fig 7]).

As to claim 5, see the discussion in claim 1 above. Rosenthal et al. further disclose that said updated workflow request further comprises a workflow engine (Col 9, lines 59-61, and Fig 1).

Regarding claim 6, see the discussion in claim 5 above. Rosenthal et al. further disclose that the step of updating said data model further comprises:

sending outcome data in notification of said workflow processed from said workflow engine to a post workflow interceptor (Col 10 lines 48-57, i.e. sending outcome data, entering submit routine, in notification of said workflow processed from workflow

engine [Col. 9 line 37-47, i.e. notification send as SA or SH] to post workflow interceptor [Figure 8]);

matching said outcome data in said notification with corresponding data objects in said data model by said post-workflow interceptor (Col 9 lines 24-47 shows how post-workflow interceptor [Fig 8] match outcome data in notification, SA or SH, with corresponding data objects [Table 1, corresponding data objects are LText, Event, and Scenario]); and

updating of said data objects in said data model with said outcome data by said post-workflow interceptor to synchronize said data model with said plurality of resources of said computer system (Col.13 lines 7-23, and Col. 10 lines 58 – col. 11 lines 3; implementing proposed change corresponds to updating said data objects in said data model [employee position is said data object in said data model, Fig 7] with outcome data by said post-workflow interceptor [Ltext, event, and scenario in table 1]. Data model, database, is synchronized with plurality of resources i.e. new employee position information).

With respect to claim 7, Rosenthal et al. anticipated the claimed invention. All the limitations of claim 7 are of the same scope as the limitations of claim 1, and are therefore rejected on the same basis, with following noted exceptions. Claim 7 recites a first updating means, a transforming means, a processing means, and a second updating means. Rosenthal et al. disclose a supplemental routine module, equivalent to transforming means (transforming function according to table 1, see Fig 1 and col. 9

lines 34-47), first updating means, and second updating means (Fig 1, col. 5 lines 1-5, i.e. first update mean, publish event, on workflow and second update mean, write database). Rosenthal et al. further disclose a processor, col. 3 lines 10-15, corresponds to a processing means.

Concerning claim 8, see the discussion in claim 7 above. All the limitations of claim 8 are of the same scope as the limitations of claim 2, and are therefore rejected on the same basis, with following noted exceptions. Claim 8 recites a determining mean and a resolving means in the first updating mean. Rosenthal et al. disclose a supplemental routine module able to act as determining mean and resolving mean. Supplemental routine module able to determine request type (col. 9 lines 24-46 i.e. SA or SH) and resolve request type (Table 1, resolve by matching mode indicator to proper scenario).

With respect to claim 9, see the discussion in claim 8 above. All the limitations of claim 9 are of the same scope as the limitations of claim 3, and are therefore rejected on the same basis, with following noted exceptions. Claim 9 recites a matching mean, a substitution mean in the resolving meaning. Rosenthal et al. disclose a supplemental routine module able to act as matching mean and substitution mean. Supplemental routine module able match request type (table 1, match mode indicator, SA or SH to scenario or event) and substitute data request type (Col. 9 line 60- col. 10 line 11 substitute scenario for corresponding mode indicator).

As to claim 11, see the discussion in claim 10. All the limitations of claim 11 are of the same scope as the limitations of claim 5, and are therefore rejected on the same basis, with following noted exceptions. Claim 11 recites a workflow engine within a processing mean. Fig 1 of Rosenthal et al. show workflow engine within a processing server, or processing mean.

As to claim 12, see the discussion in claim 11. All the limitations of claim 12 are of the same scope as the limitations of claim 6, and are therefore rejected on the same basis, with following noted exceptions. Claim 12 recites a sending mean, a matching mean, and a synchronize mean. Fig 1 of Rosenthal et al. shows a supplement routine module act as sending mean, send data to database, as matching mean, match scenario in table 1 and table 2, and as a synchronize mean, synchronize requested change with database to update current employee position (Col. 13 lines 10-23 i.e. synchronize approved status with database).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal et al. in view of Ims et al.

With respect to claim 4, see the discussion in claim 3. Rosenthal et al. disclose the claim substantially including wherein the step of resolving further comprises traversing a search hierarchy including workflow request and a defaults objects (Figure 2, where search hierarchy is traversed according to logic test; search hierarchy includes workflow request (71-81), display all possible attribute for position, and default objects, 101 job code for the opening job position).

However, Rosenthal et al. do not explicitly disclose search hierarchy includes device model. Ims et al. disclose: search hierarchy with device model (Fig 9, i.e. service unit). This known function is applicable to the search hierarchy disclosed in Rosenthal et al. as they both share characteristics and capabilities, namely, all the functions are traversable by workflow engine.

One of ordinary skill in the art would have recognized that applying the known technique of Ims et al. would have yielded predictable results and resulted in an

improved system. It would have been recognized that applying the function of Ims et al. to the teachings of Rosenthal et al. would have yield predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing feature into similar system. Further, applying device model function to search hierarchy disclosed in Rosenthal et al. would have been recognized by those of ordinary skill in the art as resulting in an improved system that would allow confirmation of device prior to workflow execution.

Regarding claim 10, see the discussion in claim 9. All the limitations of claim 10 are of the same scope as the limitations of claim 4, and are therefore rejected on the same basis, with following noted exceptions. Claim 10 recites a resolving mean further comprise means for traversing a search hierarchy. Rosenthal et al. disclose a supplemental routine module able to traverse a search hierarchy in Fig 8.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal et al. in view of Ims et al. and further in view of Danneels et al.

As to claim 13, see the discussion on claim 1-6 above. Rosenthal et al. do not explicitly teach a computer program product having a computer readable medium for performing claims 1-3, and 5-6. Rosenthal et al. and Ims et al. do not specifically teach a computer program product having a computer readable medium for performing claim 4, although it is strongly suggested in col. 3 lines 32-47 of Rosenthal et al. Danneels et al., teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46 of Danneels et al.) In addition, Danneels et al. teaches that the programs are storable on a computer-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49 of Danneels et al.). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method discussed in claims 1-6. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

As to claim 14, see the discussion on claim 1-6 above. all the limitation of claim 14 are of same scope as claim 13 and are therefore rejected on the same basis. Signal bearing medium having a computer readable signal is equivalent to computer readable medium product discussed in claim 13; hence, same rejection applied.

As to claim 15, see the discussion in claim 7-12 above. Rosenthal et al. do not explicitly teach a computer program product having a computer readable medium for performing claims 7-9, and 11-12. Rosenthal et al. and Ims et al. do not specifically teach a computer program product having a computer readable medium for performing claim 10, although it is strongly suggested in col. 3 lines 32-47 of Rosenthal et al. Danneels et al., teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46 of Danneels et al.) In addition, Danneels et al. teaches that the programs are storable on a computer-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49 of Danneels et al.). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method discussed in claims 7-12. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

As to claim 16, see the discussion on claim 7-12 above. all the limitation of claim 16 are of same scope as claim 15 and are therefore rejected on the same basis. Signal bearing medium having a computer readable signal is equivalent to computer readable medium product discussed in claim 15; hence, same rejection applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TZU-HSIANG (Sean) LAN whose telephone number is (571)270-7054. The examiner can normally be reached on Monday-Friday 8am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on (571)272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TZU-HSIANG LAN/
Examiner, Art Unit 4156
October 30, 2008

/Charles R. Kyle/
Supervisory Patent Examiner, Art Unit 4156